



MT4 Trend Indicator

Free Buy/Sell Trading Signals for MetaTrader 4

Using Moving Averages in Your Trading



“ I always check my charts and the moving averages prior to taking a position. Is the price above or below the moving average? That works better than any tool I have. I try not to go against the moving averages; it is self-destructive.” – Marty Schwartz – Known and respected Wall Street trader – Winner of U.S Investing Championship.

This is an introduction to trading with moving averages whose primary function is to determine trends and reversals. In simplest terms moving averages (MAs) calculate the average price of an asset over a certain period. Almost every professional trader uses moving averages in their trading as they are non-repainting and unbiased indicators which help to define trends and remove emotion out of trading. Day averages are most commonly used for reference in technical analysis. If you use a moving average of 10 on a daily candle chart it will show you the average price of the last ten days (10 candles). In trading, moving averages are primarily used to:

- Smooth out price action and eliminate market noise
- Find trending markets in bullish or bearish sentiments
- Establish support and resistance levels
- Set trading entry and exit points on crossovers
- Define trailing stops and control risk management

The most common types of moving averages are **Simple** (where the price average is calculated equally) and **Exponential** (where the price average is calculated with a bias towards recent prices) Although moving averages can have any value there are a certain specific averages that are known to perform better. Many traders like to use Fibonacci numbers. The most widely used moving averages are **5 EMA, 10EMA, 21EMA, 50 SMA, 100 SMA,**

200 SMA. Let's examine them individually in more detail.

5 EMA – Useful for timing entries and exits



The 5 EMA (exponential moving average), often referred to as a momentum MA, is the closest average to the actual price action out of all-of-the-above mentioned averages. It's also a Fibonacci number. It is a fast MA.

It does not perform very well on its own because it's quite susceptible to price fluctuations.

However, in conjunction with another moving average such as 50 SMA, 100 SMA or even 200 SMA it becomes quite a powerful tool for setting entries on both moving average crossovers. (as seen in picture)

The 5 EMA is mostly used in short term trading.

10 EMA – Capturing short term trends



Similar to the 5 EMA, the 10 EMA is also considered to be a fast moving average used primarily to define the direction of a short term trend. Often used by traders who trade momentum price crossovers.

Observing the 10 EMA can help a trader remain on the right side of the market.

As with the 5 EMA the probability of capturing bigger trends increases on a cross over with another, greater moving average such as 50 SMA, 100 SMA and/or 200 SMA.

The 10 EMA can also be used for defining stop loss levels in short term trading and scalping.

21 EMA – Riding intermediate term trades



The 21 EMA (Exponential Moving Average) is used in short and intermediate term trading. It's a Fibonacci number. It can be traded on its own with price crossovers or with other moving average such as the 50 SMA, 100 SMA or 200 SMA.

The 21 EMA helps traders to remain on the right side of the market. In other words look to buy when the price crosses above it or sell when the price crosses below it.

The 21 EMA is also a great trading tool for setting stop losses because it filters out most of the market noise and lets the trader maximize gains from each intermediate trend.

50 SMA – The first support and resistance line



The 50 day SMA moving average can act as a support level for an uptrend or resistance level for a downtrend.

This particular moving average is also often used as a filter for momentum traders who follow foster moving averages such as the 5 EMA or 10 EMA. When the price breaks above the 5 EMA and the 50 SMA there is an opportunity to go long.

The 50 day simple moving average is an important indicator to watch as markets generally bounce on the first pullback at this level.

The 50/200 crossover is one of the most important long term trend indicators in the market and has been for many years.

100 SMA – Support and resistance between 50 and 200



The 100 day SMA (Simple Moving Average) is a slow moving average which often acts as a support and resistance line between the 50 SMA and 200 SMA.

If the 50 SMA support has been crossed the next support line a trader should pay attention to is the 100 SMA. This support level is often observed and traded by investment fund traders so it's worth paying attention to it.

The 100 SMA is a great moving average for trading pullbacks when the price bounces off these levels to continue in the direction of the trend.

The 100 SMA can be used in long term and short term trading with price crossovers, another faster moving average crossover, and on pullbacks.

200 SMA – Long term trend filter



The 200 SMA acts as the last level of price support or resistance. It is used by long term traders for entry and exit points.

The 50/200 bullish crossover is often referred to as the 'Golden Cross' and a bearish crossover with the same setting is known as the 'Death Cross'.

The 200-Day moving average is the most widely observed and respected indicator among institutional traders.

When a price reaches and crosses the 200 SMA it is a clear sign that the overall trend is going to change.

The 200 SMA provides very strong support in range bound markets and is often used by trend scalpers.

Trading with Moving Averages – Crossovers and

Pullbacks

“*Most of this trend following ‘science’ can be explained by a decent moving average crossover. Don’t over-indulge in complexity.*” – Jerry Parker – Known trader and mentor to many successful traders.

Moving averages can be traded in various ways, such as:

- **Price crossovers** (when the price crosses the moving average)
- **Moving average crossovers** (when two or more moving averages cross over)
- **Moving average pullbacks** (when the price ‘bounces off’ the moving average and continues in the direction of the trend)



1. Price crossovers

A price crossover is one of the most fundamental signals in trading which removes all emotion. When the price action crosses a specific moving average, it can be used to identify shifts in momentum and is often used for entry or exit points.

2. MAs crossovers

When a short-term moving average (fast MA) crosses above or below a long-term moving average (slow MA) we get a moving average crossover signal. Still very objective signal and preferred by professional traders as it often indicates a more definite move.

3. MA pullbacks

The price crosses a moving average (or other MAs) and then pulls back to it, bounces off and continues in the direction of the trend. This is a good point of entry. This popular technique is often used by short-term traders in trend scalping.

The most popular moving average crossovers

To identify overall trends and **long-term** support and resistance levels big investment funds use the 50 day SMA, 100 SMA and 200 day SMA for reference. Big investment funds are the main market movers so observing these levels is very important.

Using the 50/200 crossover as the long-term trend changer has been popular to such an extent that when the 50 day SMA crosses above the 200 day SMA it is traditionally referred to as The Golden Cross, and when it crosses below it is known as The Death Cross.

However, markets change and there are many traders who prefer to use different crossovers to build their strategy. Some traders, for example, like to use numbers from the Fibonacci sequence (1, 2, 3, 5, 8, 13, 21, etc).

Recent automated testing of the Golden Cross backed by 300 years of data from 16 different global markets and 1750 different crossover combinations revealed that 10 EMA and 50 EMA performed best (16.56%). Additional, more elaborate testing revealed 13 EMA and 48.5 EMA to produces even better results. (16.88%) [See complete study](#).

common MA crossovers	
5 Day EMA	20 Day EMA
5 Day EMA	50 Day SMA
10 Day EMA	30 Day EMA
10 Day EMA	50 Day EMA
10 Day EMA	100 Day SMA
10 Day SMA	200 Day SMA
21 Day EMA	100 Day SMA
21 Day EMA	200 Day SMA
50 Day SMA	200 Day SMA
SMA - Simple Moving Average	
EMA - Exponential Moving Average	

Custom indicators based on MA crossovers

There are many professional custom indicators and expert advisers based on moving averages and their crossovers. However, we feel that TrendViper one of the best mt4 indicators based on Moving Average Crossovers. With a built-in trend power filter based on the Average Directional Index and its additional display which provides immediate insight into upper time frames, current price action and remaining candle time, TrendViper is truly a piece of unique add-on to your MT4 trading platform. It is also fully customizable and can be used in any trading system.

SEE MT4 TREND INDICATOR IN ACTION

<http://mt4trendindicator.com>